Having thus described the preferred embodiments, the invention is now claimed to be:

1. A decontamination system for an enclosure comprising ductwork for transporting air to a plurality of regions of the enclosure, the system comprising:

a means for circulating air through a ductwork system;

a means for supplying decontamination vapor to the ductwork system to be circulated therethrough.

2. The system as set forth in claim 1 further including controllable baffles disposed adjacent registers between the ductwork and rooms.

3. The system as set forth in claim 2 further including at least one of temperature, vapor concentration, and flow rate monitors disposed in conjunction with the controllable baffles.

4. The system as set forth in claim 3 further including:

a decontamination controller connected with the controllable baffles, the monitors, and the means for circulating air through the ductwork for automatically controlling a decontamination cycle.

5. The system as set forth in claim 4 wherein the decontamination controller includes:

a processor which is preprogrammed to optimize and implement a decontamination cycle which includes flowing vapor through the system in one direction, allowing the vapor to stagnate in the system, and flow the vapor in an opposite direction.

6. The system as set forth in claim 4 wherein the decontamination controller controls at least the

baffles and the means for circulating air through the ductwork to create turbulent flow.

7. The system as set forth in claim 1 wherein the means for supplying decontamination vapor includes:

a hydrogen peroxide vapor generator.

8. The system of claim 1, wherein the enclosure comprises a building or portion thereof and the regions comprise rooms.

9. The system as set forth in claim 2, further including:

at least one of the controllable baffles including a temporary baffle which is selectively inserted into a portion of the ductwork system.

10. A method of decontaminating buildings comprising:

circulating a vapor decontaminant through HVAC ductwork and associated rooms.

11. The method as set forth in claim 10 wherein the vapor decontaminant includes hydrogen peroxide vapor.

12. The method as set forth in claim 11 further including:

circulating the hydrogen peroxide vapor through the ductwork in one direction,

circulating the hydrogen peroxide vapor through the ductwork in an opposite direction, and

allowing the hydrogen peroxide vapor to dwell in the ductwork.

13. The method as set forth in claim 12 further including:

automatically opening and closing baffles at registers between the HVAC ductwork and individual rooms.

14. The method as set forth in claim 13 further including:

monitoring at least one of temperature, flow velocity, and vapor concentration; and

controlling the opening and closing of the baffles in accordance with the monitoring.

15. The method as set forth in claim 10 further including:

creating turbulent flow in the ductwork.

16. The method as set forth in claim 10 wherein the HVAC ductwork includes a plurality of independent HVAC ductwork subsystems, the method further including:

decontaminating HVAC subsystems more remote from a contamination site within the building and progressively decontaminating HVAC subsystems closer to the contamination site.

17. The method as set forth in claim 10, further including:

connecting a temporary baffle with the ductwork; and

controlling the temporary baffle to control the flow of vapor decontaminant from the ductwork to at least one of the regions.